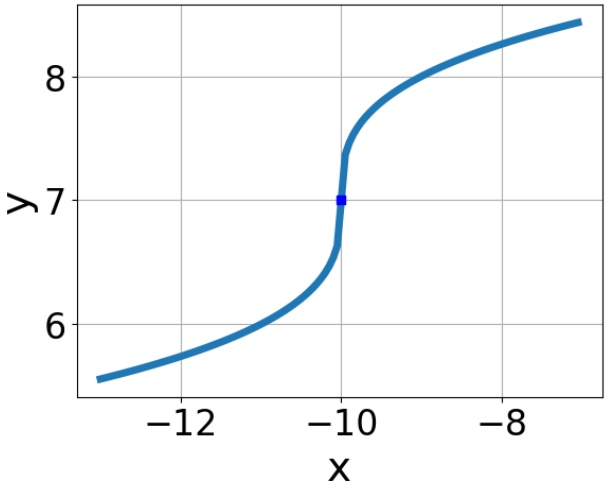
1. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt[3]{x-10}+7$

B. $f(x) = \sqrt[3]{x-10}+7$

C. $f(x) = \sqrt[3]{x+10}+7$

D. $f(x) = -\sqrt[3]{x+10}+7$

E. None of the above

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2. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-20x^2-24}-\sqrt{47x}=0$$

A. $x_1 \in [0.24, 2.82]$ and $x_2 \in [-0.2, 1.5]$

B. All solutions lead to invalid or complex values in the equation.

C. $x \in [-2.16, -1.15]$

D. $x \in [-1.47, 0.11]$

E. $x_1 \in [-2.16, -1.15]$ and $x_2 \in [-2.9, 0.3]$

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3. What is the domain of the function below?

$$f(x) = \sqrt[4]{-7x-4}$$

A. $(-\infty, a]$, where $a \in [-1.5, 4.7]$

B. $[a, \infty)$, where $a \in [-1, 1.3]$

C. $(-\infty, \infty)$

D. $[a, \infty)$, where $a \in [-3.9, -1]$

E. $(-\infty, a]$, where $a \in [-1.9, -1.3]$

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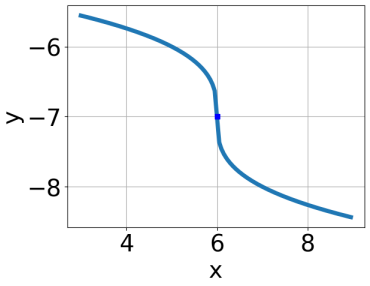
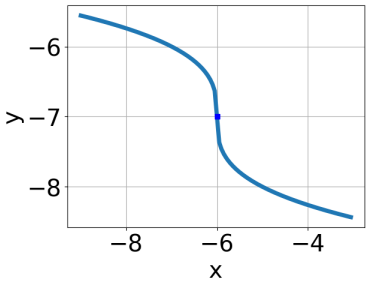
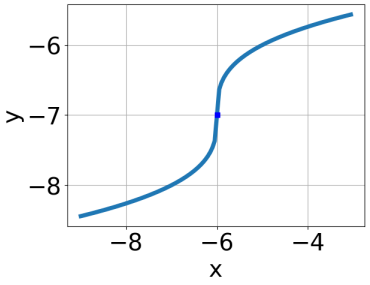
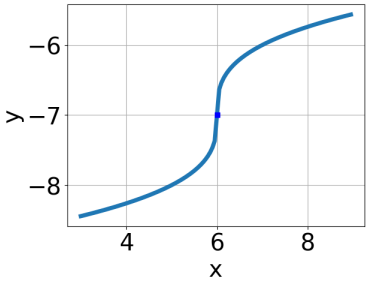
4. Choose the graph of the equation below.

$$f(x) = \sqrt[3]{x-6} - 7$$

A.


C.


B.


D.


E. None of the above.

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5. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{9x-3} - \sqrt{-2x+7} = 0$$

A. $x_1 \in [-0.07, 0.35]$ and $x_2 \in [3.5, 4.5]$

B. $x_1 \in [-0.07, 0.35]$ and $x_2 \in [-2.09, 1.91]$

C. $x \in [0.52, 1.09]$

D. All solutions lead to invalid or complex values in the equation.

E. $x \in [-0.5, -0.15]$

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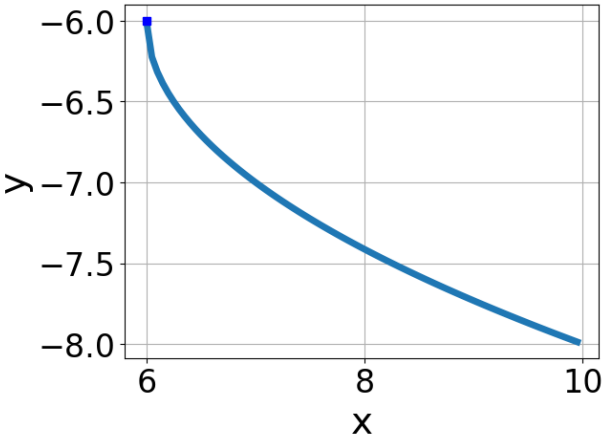
6. Choose the equation of the function graphed below.



A. $f(x) = \sqrt[3]{x+6} - 6$

B. $f(x) = \sqrt[3]{x-6} - 6$

C. $f(x) = -\sqrt[3]{x+6} - 6$

D. $f(x) = -\sqrt[3]{x-6} - 6$

E. None of the above

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7. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{9x+8} - \sqrt{6x+6} = 0$$

A. $x_1 \in [-1.1, -1]$ and $x_2 \in [-1.46, -0.82]$

B. $x \in [-4.88, -4.46]$

C. $x_1 \in [-0.89, -0.83]$ and $x_2 \in [-0.73, -0.45]$

D. All solutions lead to invalid or complex values in the equation.

E. $x \in [-0.77, -0.5]$

8. What is the domain of the function below?

$$f(x) = \sqrt[4]{-6x - 9}$$

A. $[a, \infty)$, where $a \in [-0.8, 1.4]$

B. $(-\infty, a]$, where $a \in [-2.8, -1.14]$

C. $[a, \infty)$, where $a \in [-2.7, -0.7]$

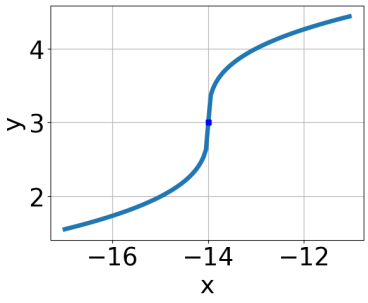
D. $(-\infty, a]$, where $a \in [-1.36, 0.56]$

E. $(-\infty, \infty)$

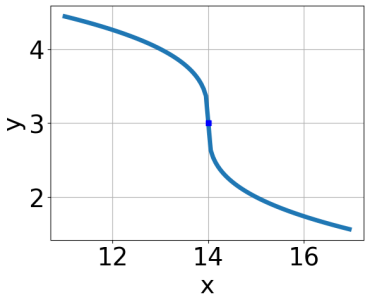
9. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x + 14} + 3$$

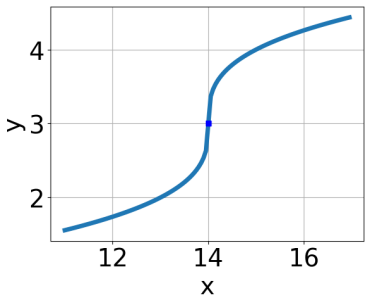
A.



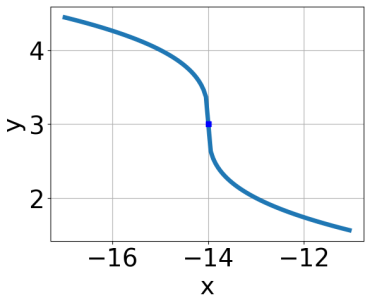
C.



B.



D.



E. None of the above.

10. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{16x^2 - 18} - \sqrt{-12x} = 0$$

A. $x \in [-2.2, -0.4]$

B. All solutions lead to invalid or complex values in the equation.

C. $x_1 \in [0.5, 1.2]$ and $x_2 \in [1.17, 1.59]$

D. $x \in [0.5, 1.2]$

E. $x_1 \in [-2.2, -0.4]$ and $x_2 \in [-0.12, 1.42]$
